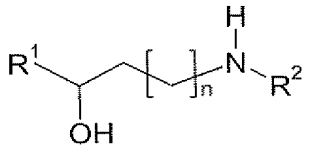
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. **(Currently amended)** A process for the enantioselective preparation of amino alcohols of formula I



I

in which

R^1 denotes a saturated, unsaturated or aromatic carbocyclic or heterocyclic radical which is unsubstituted or mono- or polysubstituted by R^3 and/or R^4,

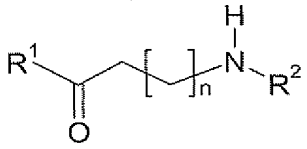
R^2 denotes alkyl having 1-20 C atoms or H,

R^3, R^4 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or $COOR^2$, F, Cl, Br, OH, CN, NO_2, $N(R^2)_2$ or $NHCOR^2$

and

n denotes 1, 2 or 3,

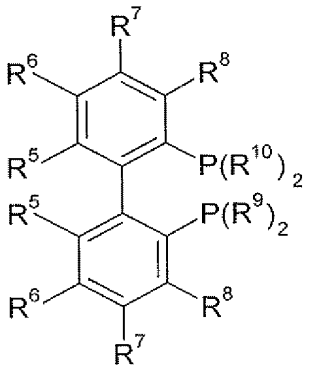
by enantioselective hydrogenation of an amino ketone of formula II



II

in which

R^1, R^2 and n have the meaning indicated above, in the presence of a non-racemic catalyst, wherein the catalyst is a transition-metal complex in which the transition metal is complexed to a chiral diphosphine ligand A

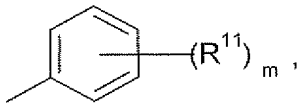


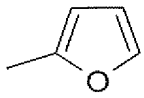
A

in which

R^5, R^6, R^7 and R^8 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or F, Cl, Br, $N(R^2)_2$ or $NHCOR^2$

each, independently of one another, denote

R^9 and R^{10}  ,



or cyclohexyl

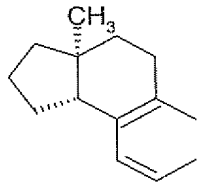
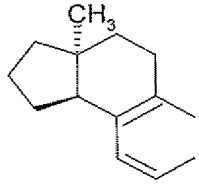
R^{11} denotes H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or SO_3Na, $COOR^{12}$, F, Cl, $N(R^{12})_2$ or $NHCOR^{12}$,

R^{12} denotes alkyl having 1-20 C atoms or H

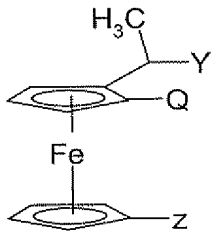
and

m denotes 0, 1, 2 or 3,

where R^5 and R^6, R^6 and R^7 and R^7 and R^8 together can also have the meaning

$-(CH_2)_4-$, $-CH=CH-CH=CH-$,  or 

or B



B

in which

Y denotes OH, P(cyclohexyl)$_2$, P(3,5-dimethylphenyl)$_2$ or P(C(CH$_3$)$_3$)$_2$,

Z denotes H or P(phenyl)$_2$,

Q denotes PPh$_2$, P(cyclohexyl)$_2$, P[3,5-bis(trifluoromethyl)phenyl]$_2$, P(4-methoxy-3,5-dimethylphenyl)$_2$ or P(C(CH$_3$)$_3$)$_2$

and

Ph denotes phenyl, o-, m- or p-methylphenyl or dimethylphenyl

and

wherein the reaction time of the enantioselective hydrogenation is from 0.1 to 30 hours.

2. (Previously presented)A process according to Claim 1, in which R^1 denotes phenyl or 2-thienyl.

3. (Previously presented)A process according to Claim 1, in which R^2 denotes methyl, ethyl, n-propyl or isopropyl.

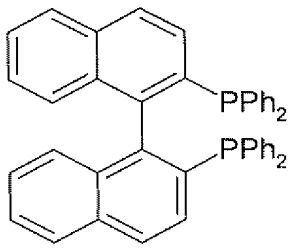
4. (Previously presented)A process according to Claim 1, in which n denotes 1.

5. (Previously presented)A process according to Claim 1 for the preparation of (S)-3-methylamino-1-phenyl-1-propanol or (S)-3-methylamino-1-(2-thienyl)-1-propanol or acid-addition salts thereof.

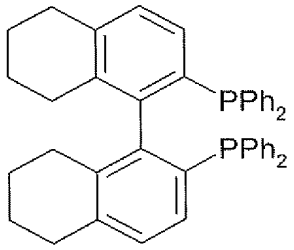
6. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the chiral, non-racemic catalyst is a transition-metal complex containing one or more metals or salts thereof selected from the group consisting of rhodium, iridium, ruthenium and palladium.

7. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the chiral, non-racemic catalyst is a transition-metal complex containing rhodium or salts thereof.

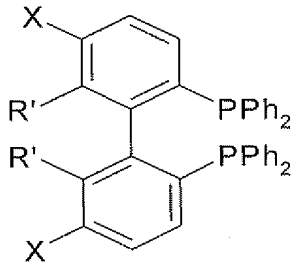
8. (Previously presented)A process according to Claim 1, wherein the chiral diphosphine ligand used is a compound of the formula A1 to A5:



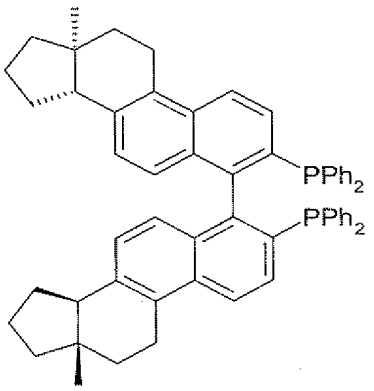
A1



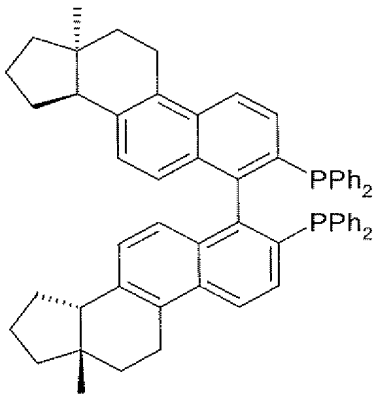
A2



A3



A4



A5

in which Ph has the meaning indicated in Claim 1, and X denotes H, alkyl, O(alkyl), Cl, or F, and R' denotes alkyl O(alkyl) or F.

9. (Previously presented)A process according to Claim 7, wherein the chiral diphosphine ligand used is (S)-(-)-2,2'bis(di-p-tolylphosphino)-1,1'-binaphthyl or (S)-(-)-2,2'bis(diphenylphosphino)-1,1'-binaphthyl.

10. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the reaction temperature is between 0 and 200°C.

11. (Previously presented)A process for the preparation of a compound according to Claim 1,wherein the catalyst/ substrate ratio is between 1:5000 and 1:50.

12. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the hydrogenation is carried out under 1-200 bar of hydrogen.

13. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the hydrogenation is carried out in the presence of an alcohol.

14. (Previously presented)A process for the preparation of a compound according to Claim 1, wherein the chiral, non-racemic catalyst is a transition-metal complex containing sulfate, chloride, bromide, iodide, PF_6, BF_4, methanesulfonate, toluenesulfonate, hexachloroantimonate, hexafluoroantimonate or trifluoromethanesulfonate as anion.

15. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein n=2.

16. (Previously presented) A process according to claim 1, where in n = 3.

17. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein said compound is obtained in an enantiomeric excess of at least 92.8%.

18. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein R^3 and R^4, independently of one another are H or methyl.

19. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein R^5 and R^6 independently of one another are H, alkyl, O-alkyl, Cl, F or in which R^5 and R^6 together form a ring system.

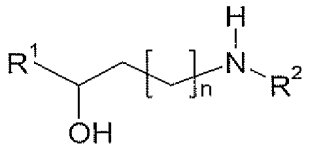
20. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein R^7 and R^8 are H.

21.. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein R^{11} is H or methyl.

22. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein R^{12} is methyl or ethyl.

23. (Previously presented) A process for the preparation of a compound according to Claim 1, wherein m is 1.

24. (Previously presented) A process for the enantioselective preparation of amino alcohols of formula I



I

in which

R^1 denotes a heterocyclic radical which is unsubstituted or mono- or polysubstituted by R^3 and/or R^4,

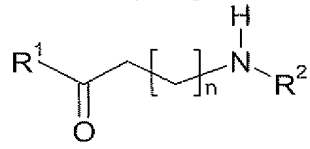
R^2 denotes methyl

R^3, R^4 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or $COOR^2$, F, Cl, Br, OH, CN, NO_2, $N(R^2)_2$ or $NHCOR_2$

and

n denotes 1, 2 or 3,

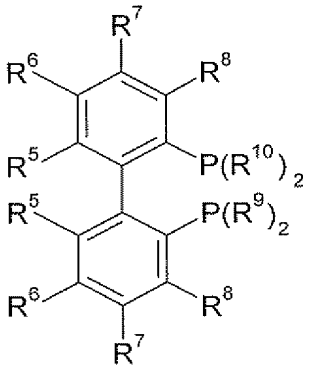
by enantioselective hydrogenation of amino ketones of the formula II



II

in which

R^1, R^2 and n have the meaning indicated above, in the presence of a non-racemic catalyst, wherein the catalyst is a transition-metal complex in which the transition metal is complexed to a chiral diphosphine ligand A

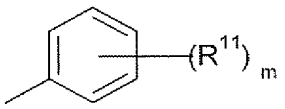
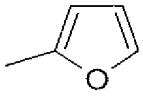


A

in which

R^5, R^6, R^7 and R^8 each, independently of one another, denote H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or F, Cl, Br, $N(R^2)_2$ or $NHCOR^2$

each, independently of one another, denote

R^9 and R^{10}  , 

or cyclohexyl

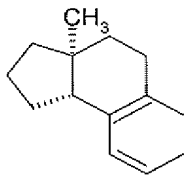
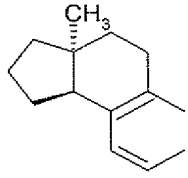
R^{11} denotes H, alkyl or alkoxy having 1-20 C atoms, aryl, aryloxy or SO_3Na, $COOR^{12}$, F, Cl, $N(R^{12})_2$ or $NHCOR^{12}$,

R^{12} denotes alkyl having 1-20 C atoms or H

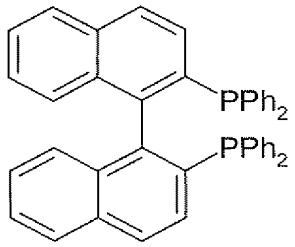
and

m denotes 0, 1, 2 or 3,

where R^5 and R^6, R^6 and R^7 and R^7 and R^8 together can also have the meaning

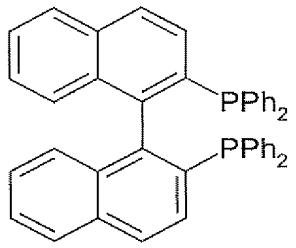
$-(CH_2)_4-$, $-CH=CH-CH=CH-$,  or 

25. **(Previously presented)** A process according to claim 24, wherein said ligand A is



wherein Ph denotes methylphenyl.

26. **(Previously presented)** A process according to claim 4, wherein said ligand A is



wherein Ph denotes methylphenyl.